## DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

MAY 6 2005

## INTERDEPARTMENT CORRESPONDENCE

FILE:

CSNHS-M002-00(966) Haralson/Carroll

**OFFICE:** Engineering Services

P. I. No.: M002966

I-20 Pavement Rehabilitation from the Alabama State Line to S.R. 61

DATE:

April 22, 2005

FROM:

David Mulling, Project Review Engineer

REW

TO:

Brent Story, State Road and Airport Design Engineer

SUBJECT:

## IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. Incorporate alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT No.	Description	Savings PW & LCC	Implement	Comments
1	Stage traffic to one side*	\$158,601	No	Two lanes in each direction on one side of the Interstate is cost prohibitive. See Alt. No. 9 which utilizes a 3/1 contra-flow scenario.
3	Replace with full-depth pavement design	\$5,596,630	Yes	
4	Use full-depth replacement at interchanges	\$3,821,500	No	Since Alternate No. 3 will be implemented, this Alternate does not apply.
6	Use "Barn Roof" side slopes to avoid extending bridge and box culverts	\$1,628,776	Yes	0 9
9	Employ single lane traffic in each direction with contra-flow*	\$3,273,178 Note: Reflects Temporary Barrier Wall savings only	Yes	A modified Alternate will be implemented that will utilize a 3/1 contra-flow scenario. This will include three lanes on one side of the Interstate and one lane on the other side of the Interstate during Staging.
12	Use 4:1 slopes in median and outside shoulders	Design Suggestion	No	Going to full-depth pavement replacement will minimize shoulder work.
14	Add Underdrains at Sags and wet areas	Design Suggestion	Yes	

ALT No.	Description	Savings PW & LCC	Implement	Comments
15	Use modified pavement design for the 18 miles of pavement between the two – three mile sections at either end where the pavement is most severely degraded	\$5,000,000	No	OMR has recommended a consistent pavement design for the entire length of the project

<sup>\*</sup> Results in a decrease in project duration

A meeting was held on April 14, 2005 to discuss the above recommendations. Floyd Moore and Jessica Granell of FHWA, Andy Casey of Road Design, and Ron Wishon and Lisa Myers of the Office of Engineering Services were in attendance.

A subsequent meeting was held on April 21, 2005 to discuss additional information concerning the Stage Construction. Jessica Granell of FHWA, Andy Casey and Angelo Yokers of Road Design and Ron Wishon of Engineering Services were in attendance.

The above reflects the consensus of those in attendance and those that provided comments.

Approved:

David E. Studstill, Jr., P. E., Chief Engineer

Date: 5/4/05

Approved:

Fol: Robert Callan, P. E., FHWA Division Administrator

Date:

REW

### Attachments

c: Gus Shanine/Floyd Moore/Jessica Grannell, FHWA

Andy Casey, Road Design, G.O.

Jason McCook, Road Design, G.O.

Lonnie Jones, Construction, G.O.

David Crim, Maintenance, TMC

Reid Matthews, Maintenance, TMC

Curtis Grovner, Maintenance, TMC

Stan Limmiatis, Traffic Safety and Design, TMC

A. J. Jubran, OMR, Forest Park

Kenny Beckworth, District 6 Construction, Cartersville

Kerry Bonner, District 6 Utilities, Cartersville

Lisa Myers

# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## INTERDEPARTMENT CORRESPONDENCE

FILE

CSNHS-M002-00(966) Haralson/Carroll County

OFFICE

Road Design

PI # M0002966

DATE

March 22, 2005

FROM

Brent A. Story P.E., State Road & Airport Design Engineer

TO

David Mulling, P.E., Project Review Engineer

SUBJECT

**VE Study Response** 

This is the response to the VE study conducted on February 17-18, 2005, for the above referenced projects. The VE study recommendations are listed in the table below.

ALT. NO.	DESCRIPTION	RESPONSES/ACTION TAKEN		
1	Stage traffic to one side	Will implement stage traffic to one side		
3	Replace with full-depth pavement design	Will implement a full-depth pavement design		
4	Use full-depth replacement at interchanges	Alternate not applicable when Alternate 3 is implemented		
6	Use "barn roof" side slopes to avoid extending bridge culverts and box culverts	Will implement barn roof side slopes to avoid impacts to culverts		
9	Employ single lane traffic in each direction with contra-flow	Will implement during weekends & off peak hours		
12	Use 4:1 slopes in median and outside shoulders	Will not implement since going to Full Depth Replacement, median and shoulder work is minimized.		
14	Add under drains at sages and wet areas	Will implement under drains		
15	Use modified pavement design for the 18 miles of pavement between the two three mile sections at either end where the pavement is most severely degraded	Will not implement, OMR has recommended a consistent pavement design for the entire length of the project.		

### BAS:JLM:CAC:ss

#### cc: Gus Shanine - FHWA

Buddy Gratton, Director, Preconstruction

David Crim, State Maintenance Engineer, Attn: Reid Mathews

David Crim, State Maintenance Engineer, Attn: Curtis Grovner

David Graham, State Construction Engineer, Attn: Lonnie Jones

Kent Sager, District Engineer-District Six, Attn: Kenny Beckworth

Kent Sager, District Engineer-District Six, Attn:Kerry Bonner

Georgene Geary, State Materials & Research Engineer, Attn: A.J. Jubran

Harvey Keepler, State Environmental & Location Engineer, Attn: Klint Rommel

Keith Golden, State Traffic Safety & Design Engineer, Attn: Stan Limmiatis

David Mulling, Project Review Engineer, Attn: Lisa Myers